

IXODES TOVARI, A NEW SPECIES FROM MEXICO¹
(Ixodidae)

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Ticks received for identification on March 14, 1945, from Dr. Raúl M. Tovar, Departamento de Investigaciones Médicas, Hospital General, México D. F., México, included seven lots of an *Ixodes* which is new to science and is here described and figured.

Accession records, all from "hares," are as follows:

- 21618, BRAVO, NUEVO LEON, MEXICO, 19 adults, 4 nymphs, 2 larvae;
21620, TORRECILLA, GUANAJUATO, MEXICO, 1 male, 1 female;
21621, COMONTOSO, GUANAJUATO, MEXICO, 1 male, 1 female;
21623, BRAVO, NEUVO LEON, MEXICO, 6 males, 1 nymph;
21624, BRAVO, NUEVO LEON, MEXICO, 1 male;
21625, BRAVO, NUEVO LEON, MEXICO, 2 males, 1 nymph;
21628, BRAVO, NUEVO LEON, MEXICO, 1 nymph.

Ixodes tovari Cooley, new species

FEMALE

Figures 1 and 2

Body. Length (unfed), tip of hypostome to posterior margin, 2.27; width, 1.15.² Oval, widest back of the middle, scutum occupying two-thirds the length of the body not including the capitulum. No fully engorged specimens available, but one specimen well advanced in feeding measures 6.5 in length and is slightly wider behind.

Capitulum. Length, tip of hypostome to tips of cornua, 0.72; width of base, 0.375. Dorsal surface of basis with sides converging posteriorly. Profile lines of anterior side of basis showing a shoulder each side of the insertion of the chelicerae. Posterior margin concave, salient. Cornua about as long as wide, terminally rounded. Porose areas small, often difficult to see; either oval or reniform, placed far apart near the posterior side near the cornua. Palpi long, article 2 a little longer than 3. Outer profile line straight or mildly convex; inner profile line convex. Stalks of the chelicerae very long.

¹ From the Rocky Mountain Laboratory (Hamilton, Mont.), National Institute of Health.

² All measurements in this paper are in millimeters.

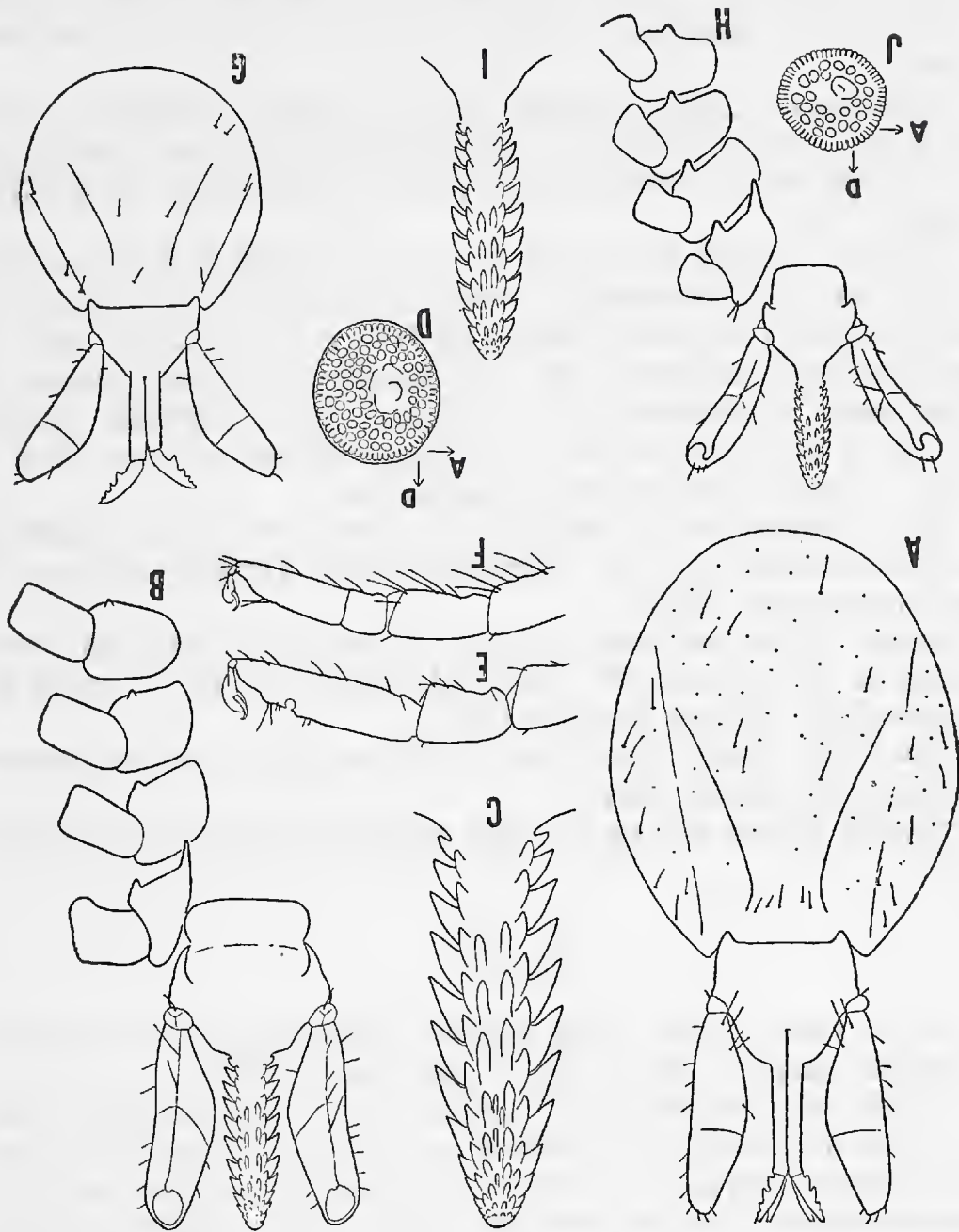


FIGURE 1

Ixodes tovari, n. sp. A. Female capitulum and scutum, dorsum. B. Female capitulum and coxae, venter. C. Female hypostome. D. Spiracular plate. E. Female metatarsus and tarsus, leg I. F. Female metatarsus and tarsus, leg IV. G. Nymph capitulum and scutum, dorsum. H. Nymph capitulum and coxae, venter. I. Nymph hypostome. J. Nymph spiracular plate.

In ventral view, basis is mildly constricted back of the auriculae; posterior margin very broadly rounded, salient. Transverse sutural line visible. Auriculae as long, thin horns directed downward and backward. Palpi with a few long and a few short hairs.

Hypostome. Long, narrow, bluntly pointed. Denticles $4/4$ on the distal end, then $3/3$ for about three-fourths the length, then $2/2$ to the base. Lateral denticles much larger than the medians. Length, 0.45.

Scutum. Length from 0.99 to 1.11; width, 0.78 to 0.84. Oval, wider anterior to the middle. Lateral carinae present as moderate, nearly parallel elevations extending from the scapulae to near the postero-lateral margins, with top rounded. Cervical grooves as faint lineal depressions, first convergent, then divergent. Surface smooth, shining, Hairs few, of moderate length and each in a pit which is larger than the fine punctations.

Legs. Moderate in length and size. Tarsi long, tapering. Length of tarsus I, 0.54; metatarsus, 0.27. Length of tarsus IV, 0.42; metatarsus, 0.30.

Coxae. All coxae mildly convex. Internal spur long on coxa I, absent on II, III, and IV. External spurs short on all coxae and progressively smaller from I to IV.

Spiracular plate. Broad oval with the longer axis transverse. Length, 0.27; width, 0.24.

Genital aperture. Opposite the intervals between coxae III and IV.

MALE

Body. Oval, a little wider behind. Total length, tip of palps to posterior margin, 1.59 to 1.86; width, 0.84 to 1.02.

Capitulum. Length, tips of palpi to tips of cornua, 0.45; greatest width of basis, 0.27. Dorsum of basis broad, mildly convex, with lateral margins converging posteriorly; surface punctate. Cornua distinct, pointed, about as wide as long. Palpi long, wide; combined length of 2 and 3, 0.30; width of palpus, 0.12.

In ventral view, basis rounded and salient behind and with the short, rounded auriculae in the same plate as the posterior salience. Palpal article I with a ventral edge continuing the ventral edge on 2 and 3. Ventral edge of 2 with several long hairs. Other short hairs numerous on the palpi.

Hypostome. Long, bluntly pointed apically. A few long lateral denticles near the middle. Ventral surface longitudinally grooved with about 17 diagonal crenulations on each half. Length, 0.30.

Scutum. Evenly convex excepting the antero-lateral areas which are mildly concave. Lateral carinae absent. Cervical grooves faint or absent. Pseudoscutal areas faintly differentiated by color or by having fewer punctations. Numerous long hairs present, each in a pit. Punctations moderate in size, deep.

Ventral plates. Median plate more than twice as long as the anal plate. Adanals wider in front. Long, fine hairs and large punctations numerous on the median plate. Long, fine hairs also on anal and adanals but true punctations are absent.

Legs. Essentially as in the female. Length of tarsus I, 0.42; metatarsus, 0.21. Length of tarsus IV, 0.36; metatarsus, 0.225.

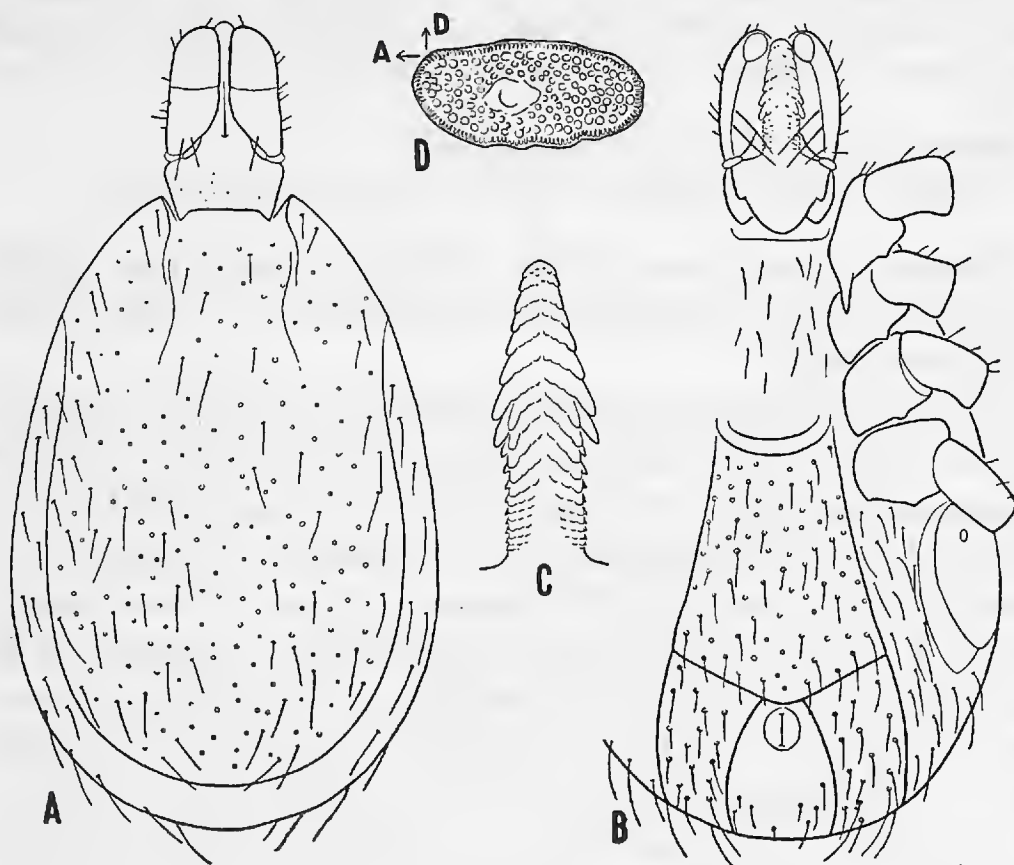


FIGURE 2

Ixodes tovari, n. sp. Male. A. Capitulum and scutum, dorsum. B. Capitulum, coxae and ventral plates, venter. C. Hypostome. D. Spiracular plate.

Coxae. Essentially as in the female but internal spur on I longer.

Spiracular plate. Oval, large and with the longer axis longitudinal. Length, 0.36; width, 0.105.

Genital aperture. With its large flap between coxae III.

NYMPH

Capitulum. Length, tip of hypostome to tips of cornua, 0.33; greatest width of basis, 0.21. Posterior margin of basis nearly straight, salient. Lateral margins divergent posteriorly. Punctations and hairs absent. Cornua distinct, divergent, a little longer than the width at the base. In ventral view, basis narrower back

of the auriculae. Transverse sutural line visible. Auriculae as short, rounded retrograde spurs.

Hypostome. Long and narrow, Dentition 3/3 for the apical half, then 2/2 to the base. Lateral denticles much larger than the medians. Length, 0.23.

Scutum. Oval, short, widest at about the middle, broadly rounded behind. Lateral carinae faintly indicated near the anterolateral margins. Cervical grooves as shallow, lineal, divergent depressions. Surface smooth, impunctate; hairs short, few, scattered.

Coxae. Essentially as in the adults.

Spiracular plate. Large, circular, diameter about 0.10.

Holotype, female from 21621. *Allotype*, male from 21621. *Paratypes*, females, males, and nymphs from 21618, 21623, 21624, and 21625.

The type materials have been deposited as follows: holotype, allotype, 21621, and some paratypes, in the Rocky Mountain Laboratory; paratypes, 2 females, 1 male, 1 nymph, 21618, U. S. National Museum, Washington, D. C.; paratypes, 1 female 21618, 1 male 21623, 1 nymph 21623, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; paratypes, 1 female 21618, 1 male 21625, Department of Entomology, University of California, Berkeley, California; paratypes, 1 female 21618, 1 male 21624, Dr. Raúl M. Tovar, México D. F., México.

In a general way, this species resembles *scapularis*, *affinis*, and *ozarkus*, but the female of *tovari* is easily distinguished by its long, horn-shaped auriculae. The male of *tovari* has the hypostome of unique appearance which separates it from all known American species of this genus.

This tick is named in honor of the collector.

JAN OBENBERGER

Through the courtesy of a soldier of the Fifth Army Corps, recently returned from Prague, I have been notified that my friend, Dr. Jan Obenberger, the Director of the Czecho-Slovakian National Museum and a world specialist in the family Buprestidae of the Order Coleoptera, is alive and well.—EDWIN C. VAN DYKE.